



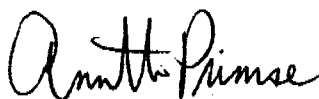
November 5, 1997

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Waste & Remediation Operations
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**MINUTES FROM THE 903 PAD PRE-REMEDIAL INVESTIGATIONS MEETING
WITH DOE AND THE AGENCIES, OCTOBER 15, 1997 - ALP-008-97**

Please find attached the minutes from the FY98 903 Pad Pre-Remedial Investigations meeting held on October 15, 1997 at 3:00 pm with DOE and the Agencies. Also attached are the agenda and attendance record.

If you have any questions, please contact Mark Wood at extension 6689.


Annette Primrose
Acting Manager, ER Projects

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Attachments:
As Stated

NOV 24 1997
ADMIN RECORD
1112-A-00003

"MEETING MINUTES"

FY98 903 PAD PRE-REMEDIAL INVESTIGATIONS

October 15, 1997 - 3:00 pm

- The meeting opened by Marla Broussard. Annette Primrose then outlined the project scope and responsibilities. Steve Paris reviewed the existing data and the investigative approach for radiologically contaminated surface soil. Mark Wood reviewed the investigative approach for subsurface radiological and VOC contamination.
- Annette Primrose summarized the project and opened up for specific comments about the SAP, the main focus of the meeting.

DISCUSSION:

- Jean Lillich - How do you know sampling is working right while it is being done?
- Marla Broussard - Project team will do calculations and preliminary research.
- Ann Sieben - Will team produce curves?
- Marla Broussard - No, curves are not the intent.
- Jean Lillich - They are reassessing the program.
- Richard Graham - Most concerned with the QA/QC. He wants a plainer geometry source for the HPGe; prove that it is less than the source.
- Jean Lillich - Regarding the soil samples in the SAP, she is confused by the numbers in the Data Summary; where are the sampling locations coming from? How is it known locations and samples are representative of the whole area?
- Steve Paris - For the subsurface inv. of the Lip Area each 2.5 acre plot is divided into 4 sub-quadrants, with a boring location in the middle. This will identify a 165 ft diameter hot spot, 95% chance of being representative of the whole area.
- Jean Lillich - Hot spot may be larger than the Pad; why use such a large grid?
- Annette Primrose - Scanning is the objective; we do not have data to answer all the questions yet; can revise the language in the Data Summary.
- Jean Lillich - What is the depth to bedrock like in the 903 area and what if you encounter DNAPL.
- Mark Wood - Depth of bedrock is 16 to 22 feet. We will drill 1 to 2 ft into bedrock; if find contamination in that depth, will drill until 1 to 2 ft beyond the depth of contamination based on field readings. If DNAPL is encountered, we will attempt to collect a sample of it and not drill any deeper.
- Ann Sieben - Will you drill different holes for the 903 Pad VOCs and RADs?
- Mark Wood - Yes. We will evaluate the rad subsurface boreholes for VOCs as we proceed.
- Jean Lillich - Page 1, paragraph 2, re. exposure area 1217 sq. ft.... need more information on the area and representativeness of contamination.
- Annette Primrose - Based on limitations of the equipment used for the gamma spec, averaging is better than specific samples. Averaging integrates the activity of the area and the 1217 sq ft is based on the FOV with a 1 meter HPGe detector ht.
- Richard Graham - Most concern is around hot spot and extent of contamination.

- Annette Primrose - If they get to the edge of the grid and have high contamination, we will not stop and will expand the survey grid area.
- Richard Graham - Need to go through SAP and rewrite so it is more coherent and easier to understand.
- Jean Lillich - Asked that a summary table be done to show samples and verbage; how many samples for each area.
- Ann Sieben - HPGe when in field, what happens?
- Jerry Anderson - Will set up aluminum tripods; do 1 hour count walking across grid covering designated sections; software will then do printout of readings.
- Richard Graham - Is 1 hour long enough?
- Jerry Anderson - Will have to assess the time based on the MDA of the equipment.
- Annette Primrose - Area is flat which is a benefit.
- Richard Graham - Has concern about the public perception; are we certain we are reading the data correctly? Define and explain how team came up with pCi/g.
- Ann Sieben - Initiated reiteration of sampling steps and procedures:
Team will start in NW corner of Am zone, use multiple HPGe equipped tripods with 12 meter FOV (1217 sq ft.) (# will depend on # of people working), record gamma value for each FOV, will get plot results, will select some for surface soil sampling, and go back and do soil samples. What is basis for selecting location of soil samples? - random samples.
- Steve Paris - Pick lower values and high values; take samples across whole spectrum of results..
- Annette Primrose - Fiddler will be used on isolated hot spots.
- Richard Graham - What is a hot spot?
- Jerry Anderson - It is defined in RFCA as 5400.5; will need to go back and redefine exactly from RFCA.
- Ann Sieben - Has sense of # of soil samples but not a sense of Fiddler areas yet - depends on readings?
- Annette Primrose - Are expecting consistency in the Plume. It should get more inconsistent as they move outward. Figure 2-1 is a good representation of the inv. area.
- Richard Graham - Show me in the SAP.
- Ann Sieben - Need high assurance nothing is being overlooked so false-positive readings are avoided.
- Richard Graham - Need to be able to assure the public the entire boundary has been identified. It needs to be statistically defensible with more samples for correlation.
- Ann Sieben - Flow chart might be a good idea.
- Richard Graham - Why would this be necessary? Does there need to be a correlation between Fiddler and HPGe?
- Jerry Anderson - No.
- Ann Sieben - Will scallop areas around boundary of study area be clean?
- Annette Primrose - Yes; will extend area if not clean.
- Richard Graham - Why Fiddle area if you know it is contaminated.
- Annette Primrose - Good question; will Fiddle isolated contaminated areas for consistency.
- Ann Sieben - When will team select where soil samples will be taken?

- Steve Paris - Will select soil samples concurrent with the tripod and Fiddler. Soil samples are estimated at 20 but not limited to 20.
- Richard Graham - SAP say a maximum of 20 samples will be taken; has concern about 20 being enough.
- Ann Sieben - With 1900 locations, how long will it take to execute?
- Annette Primrose - Approx. 5 months. This is a expensive project because the man-power aspect is intensive. In the 5 months, will take the Pad and Lip Area samples.
- Jean Lillich - Page 17, action level for carbon tetrachloride says 110/should be 11; Mark Wood has already made correction.
- Richard Graham - Methodologies for HPGe values and calibration are not provided in SAP.
- Annette Primrose - Will do, may they be in a separate document?
- Richard Graham - Yes.
- Steve Paris - Page 26, #20 soil samples will be reevaluated so language is open and not limited.
- Richard Graham - wording is critical - flow chart will help.
- Steve Paris - Table 3.3, page 32 identifies samples and locations.
- Marla Broussard - We will edit table so it is clear.
- Richard Graham - Need to define how trigger levels were arrived at.
- Annette Primrose - Will expand and make clear.
- Tom Greengard - Need to revise document looking at it with fresh eyes & perspective.
- Jean Lillich - While we do not go public with SAP, public needs to know it exists and the information within is accurate and acceptable.
- Jean Lillich - Page 19 - 25% of data for outside lab validation; how will you select the 25%?
- Richard Graham - Need to explain 80 ft x 80 ft sample area on 903 Pad; how was size determined.
- Jean Lillich - How will composite sampling be done?
- Annette Primrose - Steve Paris is working with statistician to see how best to correlate and verify the HPGe results.
- Jean Lillich - Page 20, asphalt samples need clarification.
- Ann Sieben - Regarding the Gamma Spec Program, will provide data to give alternative to just removing hot spots, or will there be no alternative but to remediate the area? Would like data available to make a precision judgment on actions to be taken.
- Ann Sieben - Wants Fiddler surveys even if HPGe readings show results above Tier I action levels so it cannot be said presumptive action was taken.
- Carl Sprauge - What appears to be a large area to us, the concerned public will seem very small and not acceptable. What means was used to define survey boundary?
- Ann Sieben - Need to be ready to defend the defined study area boundaries. How is it known there is no hot spot in the area outside the boundary?
- Carl Sprauge - What about the HPGe stop work?
- J. Anderson - RMRS is working with Safe Sites to be sure the HPGe will be in compliance before work is initiated.
- Annette Primrose - Verified with agencies that their main concern is with the wording of the SAP and the backing up of statements and assumptions, both statistical and otherwise. Agencies confirmed.

- Ann Sieben - What is the planned action?
- Annette Primrose - Currently working on the HASP; are also making sure people are trained and ready to go into the field.
- Ann Sieben - Need to think of a public communication plan, media, etc.
- Annette Primrose - Presentation to the CAB to be in the near future November/December.
- Marla Broussard - Presentation can be done the beginning of December or even early January.
- Jean Lillich - Formal submittal of SAP comments to RFFO next week.

RMRS Summary:

1. Agencies concerned about use of HPGe for contamination assessment. RMRS will rewrite introduction to SAP supporting HPGe contamination assessment and reference previous HPGe inv. onsite and offsite.
2. Agencies concerns regarding QA/QC procedures for HPGe measurements. RMRS will work with SSOC on Technical Basis Document in preparation to be completed prior to field work and submit copy to agencies.
3. Agencies did not follow sampling approach in SAP. RMRS will rewrite intro to SAP and clarify sampling section of SAP. RMRS will also provide a flow chart and a description of the rad source and dispersion conceptual model for the 903 Pad.
4. Agencies needed clarification on use of HPGe and determination of the contamination levels. RMRS will clarify SAP in regard to sample methodology, decision and MDA levels, FOV, and approach to inv. boundary limits.
5. Agencies needed clarification on the selection of the study area. RMRS will define in SAP the study area and the selection of the investigation area based on the results of the previous investigations.
6. Agencies wanted clarification on the methodology for correlation and verification of HPGe and surface soil sample results. RMRS will reevaluate the methodology for collection of surface soil samples using referenced methodologies and a statistically defensible approach for correlation of HPGe measurements to surface soil results.
7. Agencies wanted the text clarified on the purpose and selection of asphalt samples. RMRS will revise text.
8. KH wanted the SAP to include a random FIDLER survey to confirm homogeneity of the HPGe results within contiguous areas. RMRS will revise text to include three randomly selected "hot spots" for FIDLER surveys to confirm homogeneity.
9. Agencies wanted clarification of text regarding selection of laboratory results for validation. RMRS will revise and clarify text.
10. Agencies want the SAP to be statistically defensible and felt the location of subsurface boreholes for the Lip Area was not adequate. RMRS will reevaluate SAP to ensure statistically defensible approach to the sampling methodology.

Special Task
Health and Safety Plan for the Site
Characterization at the 903 Drum
Storage Area, 903 Lip Area
and Americium Zone

Investigation Area
Location Map

Figure 1.1

